



# HM2907A

PNP EPITAXIAL PLANAR TRANSISTOR

## Description

The HM2907A is designed for general purpose amplifier and high speed, medium-power switching applications.

## Features

- Low collector saturation voltage
- High speed switching
- For complementary use with NPN type HM2222A

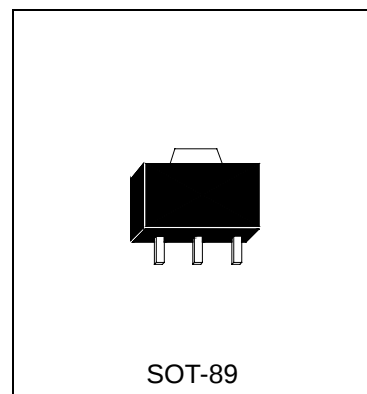
## Absolute Maximum Ratings

- Maximum Temperatures  
Storage Temperature ..... -55 ~ +150 °C  
Junction Temperature ..... +150 °C Maximum
- Maximum Power Dissipation  
Total Power Dissipation (Ta=25°C) ..... 1.2 W
- Maximum Voltages and Currents (Ta=25°C)  
VCBO Collector to Base Voltage ..... -60 V  
VCEO Collector to Emitter Voltage ..... -60 V  
VEBO Emitter to Base Voltage ..... -5 V  
IC Collector Current ..... -600 mA

## Characteristics (Ta=25°C)

| Symbol     | Min. | Typ. | Max. | Unit | Test Conditions              |
|------------|------|------|------|------|------------------------------|
| BVCBO      | -60  | -    | -    | V    | IC=-10uA                     |
| BVCEO      | -60  | -    | -    | V    | IC=-10mA                     |
| BVEBO      | -5   | -    | -    | V    | IC=-10uA                     |
| ICBO       | -    | -    | -10  | nA   | VCB=-50V                     |
| ICEX       | -    | -    | -50  | nA   | VCE=-30V, VBE=-0.5V          |
| *VCE(sat)1 | -    | -0.2 | -0.4 | V    | IC=-150mA, IB=-15mA          |
| *VCE(sat)2 | -    | -0.5 | -1.6 | V    | IC=-500mA, IB=-50mA          |
| *VBE(sat)1 | -    | -    | -1.3 | V    | IC=-150mA, IB=-15mA          |
| *VBE(sat)2 | -    | -    | -2.6 | V    | IC=-500mA, IB=-50mA          |
| *hFE1      | 75   | -    | -    |      | VCE=-10V, IC=-100uA          |
| *hFE2      | 100  | -    | -    |      | VCE=-10V, IC=-1mA            |
| *hFE3      | 100  | -    | -    |      | VCE=-10V, IC=-10mA           |
| *hFE4      | 100  | -    | 300  |      | VCE=-10V, IC=-150mA          |
| *hFE5      | 50   | -    | -    |      | VCE=-10V, IC=-500mA          |
| fT         | 200  | -    | -    | MHz  | VCE=-20V, IC=-50mA, f=100MHz |
| Cob        | -    | -    | 8.0  | pF   | VCB=-10V, f=1MHz             |

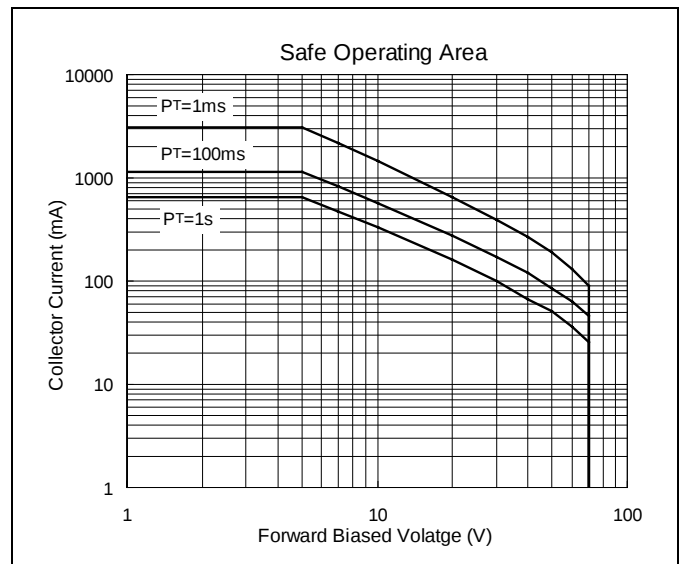
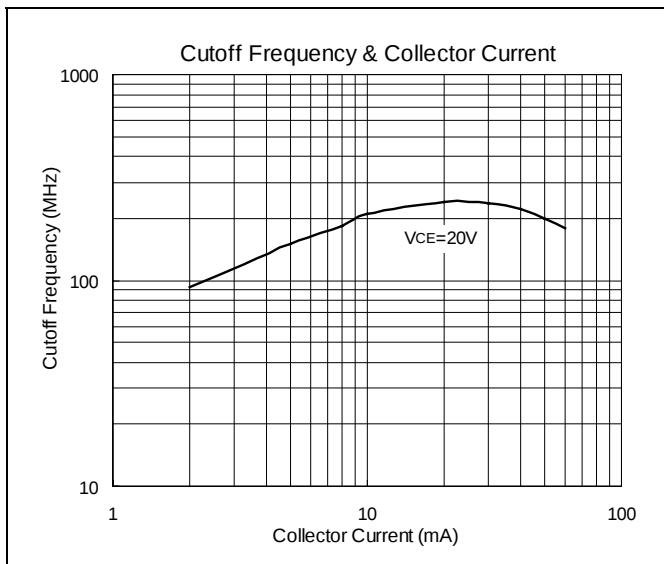
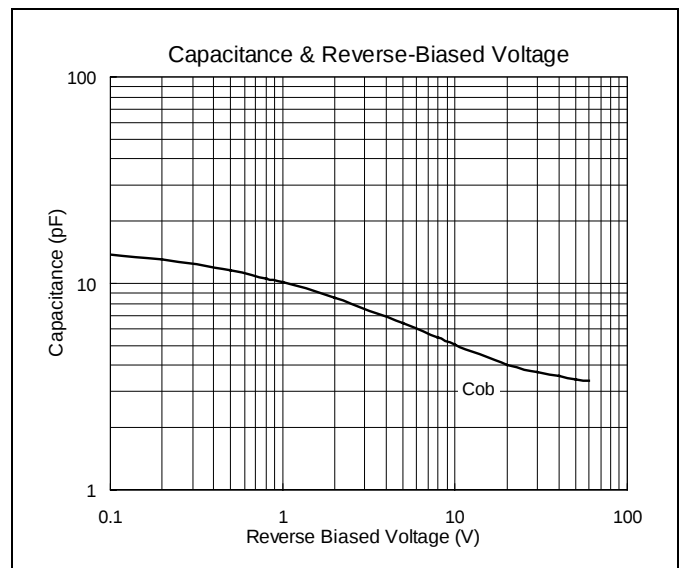
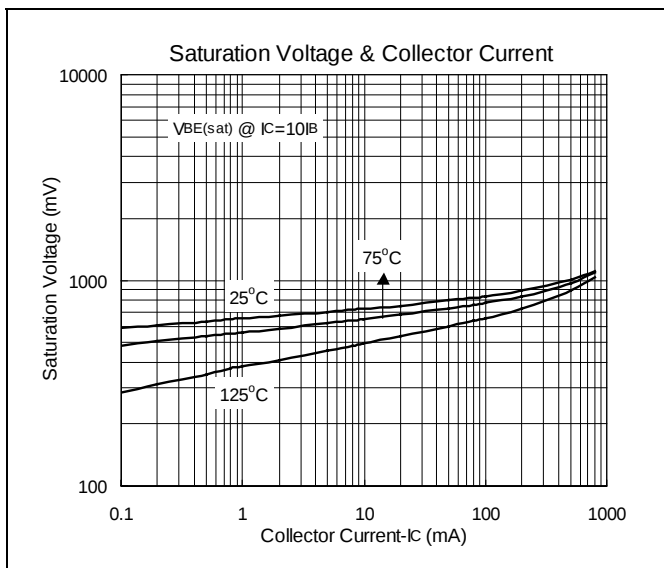
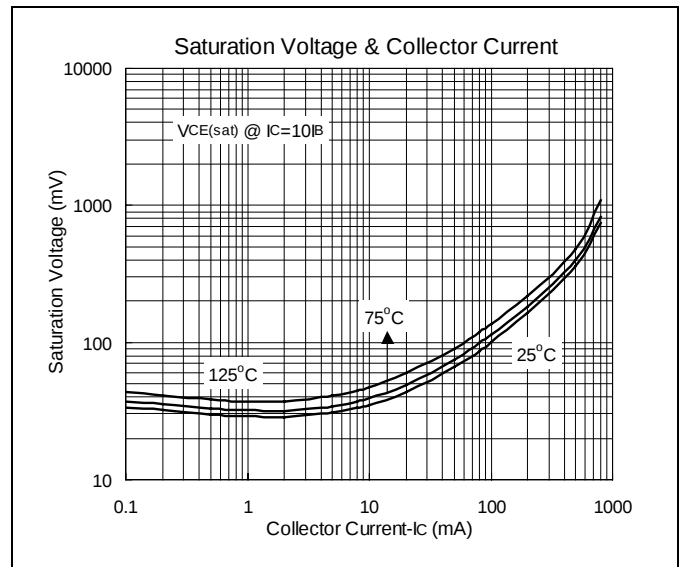
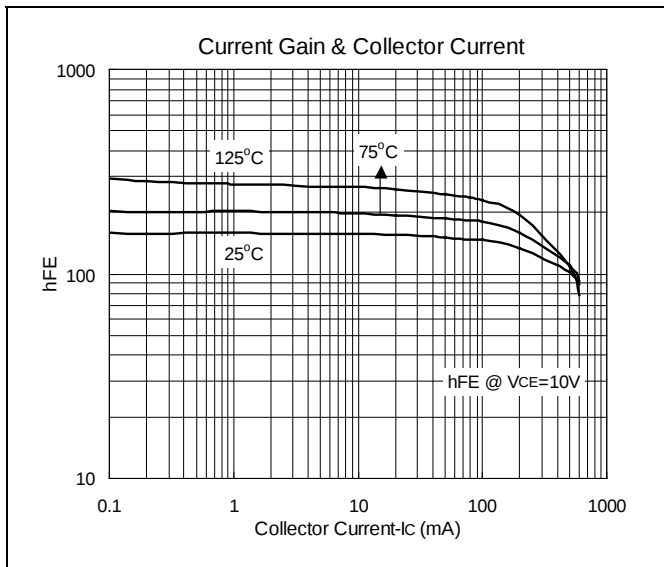
\*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%



SOT-89

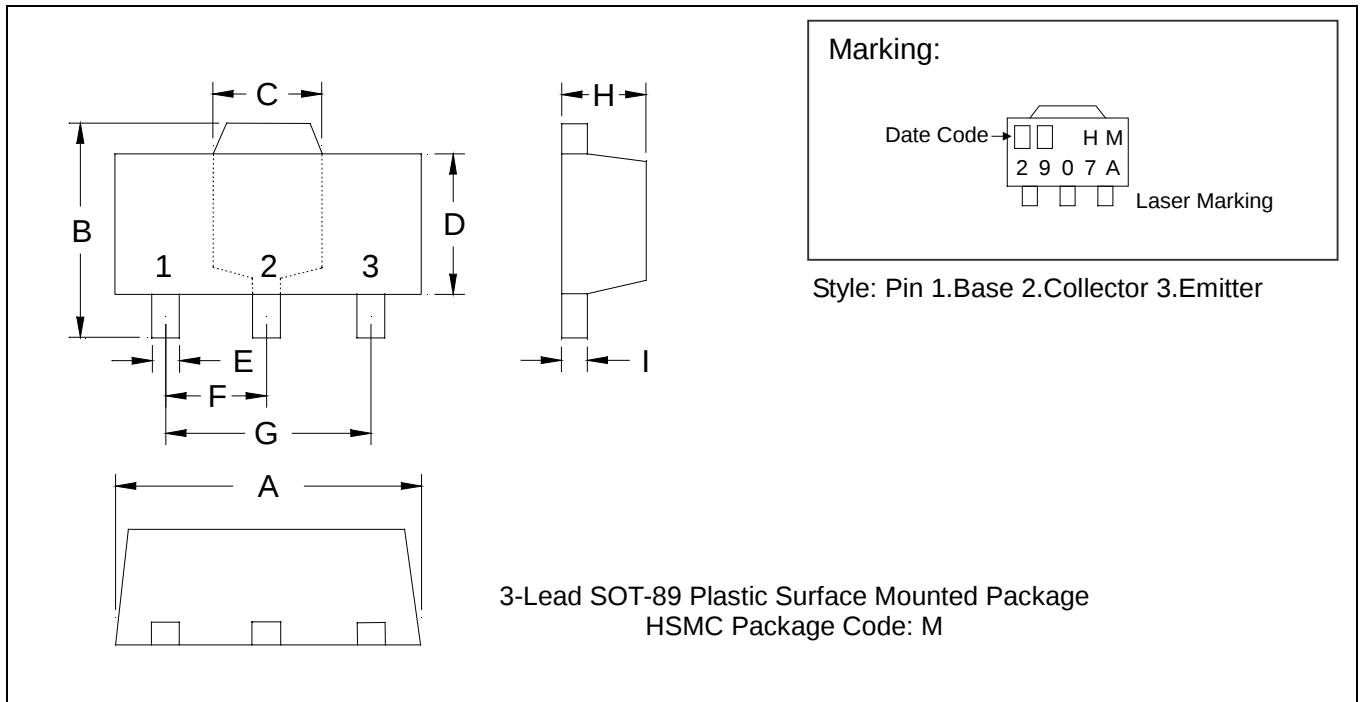


## Characteristics Curve





### SOT-89 Dimension



\*: Typical

| DIM | Inches |        | Millimeters |      | DIM | Inches |        | Millimeters |      |
|-----|--------|--------|-------------|------|-----|--------|--------|-------------|------|
|     | Min.   | Max.   | Min.        | Max. |     | Min.   | Max.   | Min.        | Max. |
| A   | 0.1732 | 0.1811 | 4.40        | 4.60 | F   | 0.0583 | 0.0598 | 1.48        | 1.52 |
| B   | 0.1594 | 0.1673 | 4.05        | 4.25 | G   | 0.1165 | 0.1197 | 2.96        | 3.04 |
| C   | 0.0591 | 0.0663 | 1.50        | 1.70 | H   | 0.0551 | 0.0630 | 1.40        | 1.60 |
| D   | 0.0945 | 0.1024 | 2.40        | 2.60 | I   | 0.0138 | 0.0161 | 0.35        | 0.41 |
| E   | 0.0141 | 0.0201 | 0.36        | 0.51 |     |        |        |             |      |

Notes: 1.Dimension and tolerance based on our Spec. dated May. 05,1996.  
2.Controlling dimension: millimeters.  
3.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.  
4.If there is any question with packing specification or packing method, please contact your local HSMC sales office.

#### Material:

- Lead: 42 Alloy; solder plating
- Mold Compound: Epoxy resin family, flammability solid burning class: UL94V-0

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